AKHROMEYKO, Avksentiy Ivanovich, doktor biol. nauk; SOKOLOV, A.V., red.

[Physiological principles of developing stable forest stands] Fiziologicheskoe obosnovanie sozdaniia ustoichivykh lesnykh nasazhdenii. Moskva, Lesnaia promyshlennost', 1965. 310 p. (MIRA 18:8)

GORSKIY, F.K.; AKHROMOVA, A.V.

Magnetic susceptibility of some organic substances. Krist. zhid. no.2:3-6 '63. (MIRA 17:7)

AKHRYMENKA,M., sadounik

Reproduction and cultivation of strawberries. Rab. i sial.30 no.8:3 of cover. Ag'54. (MLRA 8:12)
(Strawberries)

AKHSAROV, M.B. (Mineral'nyye Vody); MKRTCHYAN, M.N. (Mineral'nyye Vody)

Improving the passenger service. Zhel.dor.transp. 44
no.8:79-80 Ag '62. (MIRA 15:8)

1. Zamestitel' nachal'nika Mineralovodskogo otdeleniya Severo-Kavkazskoy dorogi (for Akhsarov). 2. Starshiy inzh. Mineralovodskogc otdeleniya Severo-Kavkazskoy dorogi (for Mkrtchyan).
(Railroads—Station service)

SHEVCHENKO, F., prof.; AKHTA~~MOV, A.,~~ dotsent; ARIPOV, S., nauchn. sotr.; PAK, N., nauchn. sotr.; NAVRUZOV, M., zhurnalist; TANKHEL'SON, A., zhurnalist; KOCHEROV, V., red.; BAKHTIYAROV,A., tekhn. red.

[I.P.Pavlov Samarkand State Medical Institute] Samarkandskii gosudarstvennyi meditsinskii institut im.akademika I.P.Pavlova; kratkii spravochnik. Tashkent, Gos.izd-vo Uzbekskoi SSR,1962. 25 p. (MIRA 16:8)

1. Samarkandskiy gosudarstvennyy meditsinskiy institut (for Aripov, Pak).

(SAMARKAND--MEDICAL COLLEGES)

AKHTAMOV, Kh.

Development of the collective farm economy in the Gissar Valley. Trudy AN Tadzh.SSR 92:3-15 '58.
(MIRA 13:4)

(Gissar Valley--Collective farms)

AKHTAMOV, Kh. (Dushanbe)

In the Department of Economics of the Academy of Sciences of Tajikistan. Vop. ekon. no.5:153 My '62. (MIRA 15:6)
(Tajikistan--Economic research)

AKHTAMOV, M. A.

AKHTAMOV, M. A.: "Characteristics of the bacteria of the intestinal-bacillus group isolated from children in healthy conditions and with intestinal disorders." Samarkand State Medical Inst imeni Academician I. P. Pavlov. Samarkand, 1956.
(Dissertation for the Degree of Candidate in Medical Sciences).

SO: Knizhnaya letopis', No 23, 1956.

USSR / Microbiology. Human and Animal Pathogens. F
Bacteria of Intestinal Group.

Abs Jour: Ref Zhur-Biol., No 2, 1959, 5585.

Author : Shevchenko, F. I.; Akhtamov, M. A.
Inst : Not given.
Title : Pathogenic Properties of E. Coli Isolated From Children in Simple and Toxic Dyspepsia and in Dysentery.

Orig Pub: Med. zh. Uzbekistana, 1958, No 1, 20-23.

Abstract: 6,277 strains of Escherichia (EC) isolated from children were examined during, prior to, and after illness. The following criteria of variability of the strains as evidence of their pathogenicity were employed: ability to produce hemolysis on blood agar, non-agglutination

Card 1/3

USSR / Microbiology. Human and Animal Pathogens. F
Bacteria of Intestinal Group.

Abs Jour: Ref Zhur-Biol., No 2, 1959, 5585.

Abstract: 0.88% of cases before illness, 12.3% during, and 0.4% after illness. In toxic dyspepsia, 24.2% pathogenic strains were found during illness, and 2.9% after. The dynamics of changes of individual indexes of pathogenicity followed this pattern. An exception was the sucrose index, which was at the same level during and after illness. In dysentery the percent of pathogenic strains also decreased after illness (from 81 to 64.1%). The difference in indexes of pathogenicity was less marked. In the author's opinion these data indicate the variability of EC properties during illness, and point to its possible role in the pathogenesis of disease. -- E. B. Gurvich.

Card 3/3

SHEVCHENKO, F.I.; AKHTAMOV, M.A.; ISHCHENKO, G.N.; YEL'TEKOA, N.I.

Some results of the study of Escherichia coli with relation to problems in the etiology of diarrhea in infants. Pediatriia 38 no.1:17-23 '60. (MIRA 13:10)
(DIARRHEA) (ESCHERICHIA COLI)

AKHTAMOV, M.A., kand.med.nauk; KHAKNAZAROV, T., student III kursa

Antigenic properties of Escherichia coli excreted by various persons. Med. zhur. Uzb. no.3:23-25 Mr '61. (MIRA 14:5)

1. Iz kafedry mikrobiologii (zav. - prof. F.I.Shevchenko) Samarkandskogo gosudarstvennogo meditsinskogo instituta imeni I.P.Pavlova.
(ESCHERICHIA COLI) (ANTIGENS AND ANTIBODIES)

SHEVCHENKO, F.I., prof.; AKHTAMOV, M.A.; ISHCHENKO, G.N.; KAZAKOVA, A.N.;
EL'TEKOVA, N.I.

Biological characteristics of pathogenic serological types of Escherichia coli. Med. zhur. Uzb. no.2:22-25 F '62. (MIRA 15:4)

1. Iz kafedry mikrobiologii Samarkandskogo gosudarstvennogo meditsinskogo instituta imeni I.P.Pavlova.
(ESCHERICHIA COLI)

SHEVCHENKO, F.I., prof.; AKHTAMOV, M.A.; ISHCHENKO, G.N.; KAZAKOVA, A.N.;
EL'TEKOA, N.I.

Some results of a study of Escherichia coli in connection with the etiology of diarrhea in small children. Pediatria 38. no.4: 17-23 Apr'60. (MIRA 16:7)

1. Iz kafedry mikrobiologii (zav.-prof. F.I.Shevchenko) Samarkandskogo meditsinskogo instituta imeni akademika Pavlova.
(ESCHERICHIA COLI) (DIARRHEA)

AKHTARDZHIYEV, Kh.; KOLEV, D. (Sofiya)

Study of the composition of a mucous substance in flores Tiliae argenteae. Apt. delo 10 no.6:78-82 N-D '61. (MIRA 15:2)
(LINDEN)

Deceased *

AKHTAROV, B.

Rodut Carex (ostritsa) v Bulgaria.

Sofiia, Bulgaria Bulgarska akademiia na naukite, 1957. 178 p.

*AKHTAROV, BORIS obituary ✓
Dr Biol Sci - IZV Inst. Bot. BAN 7, p 3-7, 1960

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 10, Oct. 1959.
Uncl.

RODYAKIN, V.V.; ANDREYEV, A.Ye.; BOYKO, Yu.N.; VAYNSHTEYN, G.M.; KARGIN, V.M.; BRODSKIY, E.Ye.; KHABAROVA, N.P.; TKALICH, V.S.; Prinimali uchastiye; PIROZHOK, Ye.V.; YURCHENKO, S.V. [deceased]; MUNTYANOV, I.P.; SUKHORUKOVA, N.Yu.; BULANAYA, N.K.; AKHTEMENKO, N.Ya.; BRAGIN, A.M.

Handling of molten metallic magnesium. TSvet. met. 37 no.12: 53-56 D '64.
(MIRA 18:2)

AKHTEROV, Iosif Samoylovich, arkhitektor-khudozhnik; MILETITSKAYA, Feofaniya Romanovna, arkhitektor; SAPOZHNIKOV, Vladimir Vasil'yevich, inzh.; SVESHNIKOV, Oleg Aleksandrovich, kand. arkhitektury. Prinimali uchastiye: KRYZHANOVSKAYA, A.S., arkhitektor; ZAGAL'SKAYA, O.A., khudozhnik. MAL'CHEVSKIY, V., red.-sostavitel'; GARKAVENKO, L., tekhn.red.; GRISHKO, T., tekhn.red.

[Home furniture; design and construction manual] Mebel' dlia zhil'ia; posobie po proektirovaniiu. Kiev, Gos.izd-vo lit-ry po stroit. i arkhit. USSR, 1960. 295 p.

(MIRA 14:4)

1. Akademiya stroitel'stva i arkhitektury USSR. Institut arkhitektury sooruzheniy.

(Furniture)

AKHTEROV, Iosif Samoylovich; KARAKIS, Irma Iosifovna; SVESHNIKOV, Oleg Aleksandrovich; KLEKOVKIN , M.P., red.; KIYANICHENKO, N.S., red.; LEUSHCHENKO, N.L., tekhn. red.

[Furniture for one-family apartments] Mebel' dlia kvartir odnosemeynogo zaseleniia. [By] I.S.Akhterov i dr. Pod red. M.P.Klekovkina. Kiev, Gosstroiizdat USSR, 1962. 192 p. (MIRA 17:1)

1. Akademiya budivnytstva i arkhitektury URSR. Instytut arkhitektury sporud. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury Ukr.SSR (for Klekovkin).

S/017/61/000/002/001/001
A110/A133

1.1200
9.2300

AUTHOR: Akhtin, V., Captain Engineer, Candidate of Technical Sciences

TITLE: Kilometers of wire from one drop of metal

PERIODICAL: Voyennyye znaniya, no. 2, 1961, 17 - 18

TEXT: Soviet scientists headed by Lenin Prize Winners 1960 Professor A.V. Ulitovskiy and Graduate Engineer V.G. Krasin'kov have developed two new production methods of high-quality microwires. The first method permits the production of 1 - 120μ diameter glass-insulated microwires and is based on the plasticity of molten glass and on the suction property of molten metal. The process is explained on a simplified device (Fig. 1) consisting of a miniature furnace (1), 10 - 15 mm diameter "nonex" glass tube (2) and drum (5). A 1 - 2 g metal drop, e.g. manganine (3) placed on the bottom of the glass tube and melted by the furnace (1) heats the bottom of the glass tube and attaining the required temperature [Abstracter's note: degree of temperature not specified] the molten glass forms a 5 - 20μ diameter capiliary tube with a manganine core (4), i.e. a glass insulated microwire which is coiled up on a drum (5). The diameter depends on the temperature of the molten glass and on the rotating speed of the drum. The device

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S/017/61/000/002/001/001
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Kilometers of wire from one drop of metal

is semiautomatic, and operated by 1 attendant. With 1 - 2 g metal, several kilometers of high quality microwire, used in radio engineers and electronics and combined with magnetic materials, can be produced. The glass retains its insulating property over a long time and is moisture and acidproof, resisting even high concentrated boiling sulfuric acid. The wire diameter can be further reduced by heating of 1 mm microwire of somewhat thicker glass insulation until the metal coil is melted after which the soft wire is stretched by a special, non-specified device. Such micro-gage invisible microwires having a resistance of several thousand ohms retains its full electric conductivity. Not specified foreign press sources reported on submarines whose fully automatic atomic powered engines included a great number of various relays using microwires. The voltage arc is successfully prevented by placing the relay in a vacuum. Microwire coiling ensures maximum efficiency as it has the advantage that not only the contacts but the whole relay can be placed inside the vacuum. Vacuum relays ensure steady performance at greatly varying temperatures which makes them suitable for use in microthermometers, electric micromotors etc. The second production method of microwires is based on the fountain effect. In a device (Fig. 2) the molten metal (3) in autoclave (2) is pressed by inert gas, supplied by pipe (1), through nozzle (5) into cooler (6), which, causing an immediate hardening of outcoming metal, (4) ensures its shape.

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S/017/61/000/002/001/001
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Kilometers of wire from one drop of metal

Lead microwires obtained by this method are used for pressing of accumulator plates whereas aluminum microwires are used for reinforcement of rubber tires rendering them bulletproof. At present, recently developed micro-technical and micro-metallurgical methods are being introduced into allied production fields. The Leningradskiy gosudarstvennyy universitet (Leningrad State University) has developed an ultrasonic perforated glass microsieve with 1,000 apertures on a plate of 80μ thickness with the cross section of a human hair. There are 3 figures.

Figure 1:

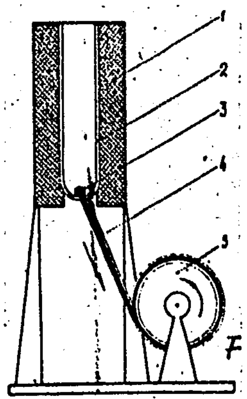
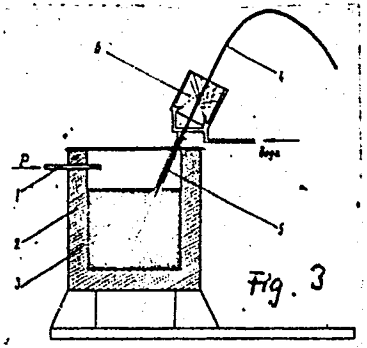


Figure 2:



Card 3/3

VVEDENS'KIY, P.I.[Vvedens'kyi, P.I.], prof.; GAREV, L.P.[Hariev, L.P.], kand. ekonom. nauk; ALENINA, M.T.; AKHTIRCHENKO, G.M. [Akhtyrchenko, H.M.]

Study of the use of coke gas as a raw material for different branches of the chemical industry. Kompl. vyk. pal.-energ. res. Ukr. no.1:243-256 '59. (MIRA 16:7)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut.
(Coke-oven gas)

AKHTOMOVA, L. A.

Akhtomova, L. A.

"Clinic-hematological comparisons in tuberculous meningitis in children during the therapeutic process." Khar'kov Medical Inst. Khar8kov, 1956. (Dissertation for the Degree of Candidate in Medical Sciences).

Knizhnaya letopis'
No. 21, 1956. Moscow.

AKHTUBIN, S.

Wonderful oil. NTO 4 no.5:60-61 My '62. (MIRA 15:5)

1. Akademiya pedagogicheskikh nauk RSFSR.
(Corn oil)

AKHTYAMOV, F.K.

Role of degenerative-dystrophic lesions of the acromioclavicular joint in the clinical syndrome of the so-called humeroscapular periarthritis. Trudy LIETIN no.16:380-386 '64.

Anatomical X-ray picture of degenerative-dystrophic processes in the acromioclavicular joint. Ibid.:387-397 (MIRA 19:1)

1. Pervyy Leningradskiy meditsinskiy institut imeni akademika I.P. Pavlova.

AKHTYAMOV, K.Ya.

make wider use of hydraulic piston pumps. Neftianik 7 no.7:18 Jl '62.
(MIRA 16:3)

1. Nachal'nik vtorogo uchastka neftepromyslovogo upravleniya Tuymazaneft'.

(Azerbaijan—Oil well pumps)

AKHTYAMOV, Ya.

Main direction. Izobr. i rats. no.1:8-9 Ja '59.
(MIRA 12:1)

1. Nachal'nik eksperimental'nogo otdela Ural'skogo filiala Akademii stroitel'stva i arkhitektury SSSR.
(Building research)

SOV/115-59-7-16/33

28(1,2)

AUTHOR: Akhtyamov, E.Z.

TITLE: An Automatic Device for Sorting Permanent Magnets

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 7, pp 30-31 (USSR)

ABSTRACT:

The author describes an automatic device for sorting cylindrical permanent magnets for which he received Author's Certificate Nr 600276/2, dated May 24, 1958. A drum-type feed machanism places the magnets into the measuring circuit, shown in fig.1. The feed mechanism is shown in fig.2. When the magnet to be tested is placed into the air gap of the measuring circuit, a contact is closed and the magnet is magnetized to full saturation by a thyratron magnetizing device show in circuit diagram (Fig.3). The magnetic flux will deflect a measuring frame. In case of a small deflection, a photo-relay will actuate a mechanism transferring the magnet into the "unserviceable" tray. In case the deflection is large enough, the photo relay will not work and the magnet will be dropped into the "serviceable" tray. Two counters register the numbers of serviceable and unserviceable magnets. The relay circuit diagram is shown in fig.4. The automatic device has been successfully

Card 1/2

SOV/115-59-7-16/33

An Automatic Device for Sorting Permanent Magnets

tested using permanent magnets, whose test results were certified by VNIIM. The automatic device will sort about 600 permanent magnets per hour. This amount may be still increased by using a different feed mechanism. Presently, work is being continued on the development of a feed bunker which will replace the drum-type feed mechanism. There are 1 diagram, 3 circuit diagrams and 1 Soviet reference.

Card 2/2

ACC NR: AR6035060 SOURCE CODE: UR/0058/66/000/008/E114/E114

AUTHOR: Akhtyamov, O. S.

TITLE: Theory of ferromagnetic superconductors

SOURCE: Ref. zh. Fizika, Abs. 8E885

REF SOURCE: Uch. zap. Ural'skogo un-ta. Ser. fiz., vyp. 1, 1965, 139-145

TOPIC TAGS: ferromagnetic superconductivity, electron spin

ABSTRACT: The pairing of electrons with antiparalled (↑↓) and parallel (↑↑) spins is investigated. It is concluded that model (↑↑) yields a better description of the state which characterizes the coexistence of ferromagnetism and superconductivity. [Translation of abstract] [DW]

SUB CODE: 20/

Card 1/1

L 393[illegible]-65 EPA(s)-2/EWT(1) [illegible]

[illegible]

32

AUTHOR: Akhtyamov, O. S.; Berdyshev, A. A.

17
B

TITLE: Interaction between conduction electrons and spin waves in a superconducting ferromagnet 21

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 1, 1965, 14-24

TOPIC TAGS: superconductivity, fer[illegible]

[illegible]

[illegible] thors show first how to obtain the results already known for a normal ferromagnet. The phonon mechanism, which is ess[illegible] for superconductivity, [illegible]

[illegible]

written out for a system of conduction electrons [illegible] with phonons and [illegible]

[illegible]

L 39383-65

ACCESSION NR: AP500426[illegible]

[illegible] compared with the [illegible] of the conduction [illegible] spin-wave excitation [illegible] exchange integral [illegible] The attenuation [illegible] was also calculated [illegible] discussion of the [illegible]

[illegible]

SUBMITTED: 14Apr64 ENCL: 00 SUB CODE: EM, NP

NR REF SOV: 004 OTHER: 005 ATD PRESS: 3194

L 21574-66 EWT(m)/EWA(d)/EWP(t) JD
ACC NR: AP6011493 SOURCE CODE: UR/0386/66/003/007/0284/0287

AUTHOR: Akhtyamov, O. S.

50
B

ORG: Bashkir State University (Bashkirskiy gosudarstvennyy universitet)

TITLE: A possible experiment for finding superconductors with different pair multiplicity

18

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 7, 1966, 284-287

TOPIC TAGS: superconductivity, pair theory

ABSTRACT: The author points out that the hypothesis that certain superconductors can be in the triplet state, or generally in a state with $l \neq 0$ can be checked experimentally by measuring the Josephson tunneling, since it can be shown mathematically that the angular-momentum conservation law forbids the Josephson effect for structures consisting of superconductors with pairs in different orbital states. Since an analysis of the expression for the tunneling Hamiltonian, with calculations carried out for zero temperature and voltage, shows that experiment cannot identify the state of the superconductors, the author concludes that to find superconductors with different l it is necessary to start with "transition element --

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L 21574-66
ACC NR: AP6011493

principal-group element" structures, using samples of a size large enough so that no Larkin effect (Pis'ma ZhETF v. 2, 205, 1965) appears in any of the cases. It is noted in conclusion that in such an experiment l is not a sufficiently good quantum number. It is therefore more likely that it will permit discrimination of superconductors with different pair multiplicities. Orig. art. has: 10 formulas.

SUB CODE: 20/ SUBM DATE: 03Feb66/ ORIG REF: 004/ OTH REF: 004

Card 2/2

DEM'YANOV, L.A., kand.tekhn.nauk; AKHTYAMOV, U.S.; AGEYEV, I.V.; PAKHOMOV, K.A.
SARAFANOV, S.K.

Performance of IaAZ-204 engines fueled with light gasoline. Avt.prom. no.2:23-27 F '61. (MIRA 14:3)
(Automobiles—Engines)(Gasoline)

AKHTYAMOVA, Z. S.

"Data on the Use of Penicillin in Surgical Practice." Cand Med Sci, Kazan' State Medical Inst, Kazan', 1954. (KL, No. 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

AKHTYAMOVA, Z.S., assistent; FEDOROV, V.V., aspirant

Multiple perforation from dysenteric ulcers. Kaz.med.zhur. 40 no.4: 81-82 Jl-Ag '59. (MIRA 13:2)

1. Iz kafedry gospital'noy khirurgii (zaveduyushchiy - prof. N.V. Sokolov) Kazanskogo meditsinskogo instituta.
(DYSENTERY) (INTESTINES--ULCERS)

AKHTYAMOVA, Z.S., assistent

Experience in surgery of the thyroid gland. Kaz. Med. Zhur. no.6:7-9 '62. (MIRA 17:5)

1. Klinika gospital'noy khirurgii (zav. - prof. A.V. Sokolov) Kazanskogo meditsinskogo instituta, na baze 1-y gorodskoy bol'nitsy (glavnyy vrach A.Z. Sinyavskaya).

AKHTYRCHENKO, A.M.

VVEDENSKIY, P.I.; ALEMINA, M.T.; TESLENKO, F.F.; AKHTYRCHENKO, A.M.;
ISHCHENKO, G.N.

Economics of the removal of hydrogen sulfide from coke-oven. Koks i khim. no.3:46-49 '58. (MIRA 11:3)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut (for Vvedenskiy, Alenina, Teslenko). 2. Ukrainskiy uglekhimicheskiy institut (for Akhtyrchenko, Ishchenko).
(Coke-oven gas) (Hydrogen sulfide)

VOLOSHIN, A.I.; BOGOYAVLENSKIY, K.A.; AKHTYRCHENKO, A.M.; TURIK, I.A.; ZHIDKO, A.S.; LYALYUK, V.S.; GABAY, L.I.; ONOPRIYENKO, V.P.; STARSHINOV, B.N.; BABIY, A.A.; SAVELOV, N.I.; Prinimali uchastiye: TORYANIK, E.I.; VASIL'YEV, Yu.S.; SHEMEL', T.I.; SENYUTA, V.I.; BONDARENKO, I.P.; AMSTISLAVSKIY, D.M.; ANDRIANOV, Ye.G.; SERGEYEV, G.N.; ZAMAKHOVSKIY, M.A.; LYUKIMSON, M.O.; IVONIN, V.K.; TSIMBAL, G.I.; SEN'KO, G.Ye.; KONAREVA, N.V.; SOLODKIY, Yu.L.; LUKASHOV, G.G.; TARASOV, D.A.; GORBANEV, Ya.S.; SUPRUN, I.Ye.; TIKHOMIROV, Ye.I.; KONONENKO, P.A.; PROKOPOV, V.N.; GULYGA, D.V.; PLISKANOVSKIY, S.T.; PONOMAREVA, K.Ye.

Effect of the length of coking on coke quality and the performance of blast furnaces. Koks i khim. no.12:26-32 '61. (MIRA 15:2)

1. Ukrainskiy uglekhimicheskiy institut (for Voloshin, Bogoyavlenskiy, Akhtyrchenko, Turik, Zhidko, Lyalyuk, Toryanik, Vasil'yev, Shemel'). 2. Zhdanovskiy koksokhimicheskiy zavod (for Gabay, Senyuta, Bondarenko, Amstislavskiy, Andrianov, Sergeyev, Zamakhovskiy, Lyukimson, Ivonin, TSimbal). 3. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (for Onopriyenko, Starshinov, Babiy, Sen'ko, Konareva, Solodkiy). 4. Zavod "Azovstal'" (for Savelov, Lukashov, Tarasov, Gorbanev, Suprun, Tikhomirov, Kononenko, Prokopov, Gulyga, Pliskanovskiy, Ponomareva).

(Coke)
(Blast furnaces)

AKHTYRSKAYA, L.G.; MAZO, A.A.

Hygienic evaluation of balanced nutrition in kindergartens.
Vop. pit. 19 no.3:27-33 My-Je '60. (MIRA 14:3)

1. Iz laboratorii (zav. - dotsent L.G. Menin) Dorozhnoy sanitarno-epidemiologicheskoy stantsii Yugo-vostochnoy zheleznoy dorogi, Voronezh.

(CHILDREN—NUTRITION)

MAZO, A.A.; AKHTYRSKAYA, L.G.; Prinimal uchastiye KOROLEV, M.V.

Study of the nutrition of diesel locomotive operators. Vop. pit. 20 no.6:31-33 N-D '61. (MIRA 15:6)

1. Iz laboratorii (zav. - dotsent L.G. Menin) sanitarno-epidemiologicheskoy stantsii Yugo-Vostochnoy zheleznoy dorogi, Voronezh.

(NUTRITION)
(LOCOMOTIVE ENGINEERS)

MAZO, A.A.; AKHTYRSKAYA, L.G.

Comparison of the 1954 and 1961 editions of tables listing
chemical composition and nutritional values of food products.
Vop. pit. 22 no.6:74-75 N-D '63. (MIRA 17:7)

1. Iz laboratorii Dorozhnoy sanitarno-epidemiologicheskoy stantsii
Yugo-vostochnoy zheleznoy dorogi (nachal'nik L.G. Menin), Voronezh.

FEDYANIN, B.I.; AKHTYRSKAYA, T.I.; PEPENKO, V.D.

Compacting large molds by pressing. Lit.proizv. no.7:15-16 Jl '62. (MIRA 16:2)

(Machine molding (Founding))

FEDYANIN, B.I., inzh.; AKHTYRSKAYA, T.I., inzh.; PEPENKO, V.D., kand. tekhn. nauk

Pressing large molds. Mashinostroenie no.3:32-35 My-Je '63.
(MIRA 16:7)

1. Khar'kovskiy filial instituta avtomatiki.
(Molding machines)

AKHTYRSKAYA, T.I.; PEPENKO, V.D.; FEDYANIN, B.I.

Small batch production of molds on a sand slinging and squeeze molding machine. Lit. proizv. 5:21-23 My '64. (MIRA 18:3)

KUCHERENKO, Ye.T.; AKHTYRSKAYA, Ye.V.; DEM'YANENKO, V.P.

Effect of the ion bombardment of inert gases and hydrogen on the electron emission of pressed cathodes. Radiotekh.i elektron. 8 no.2:279-287 F '63. (MIRA 16:2)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.
(Cathodes) (Thermionic emission)

KUCHERENKO, Ye.T.; SAYENKO, V.A.; AKHTYRSKAYA, Ye.V.

Nature of a reflector discharge in a magnetic field. Radiotekh. i elektron. 10 no.10:1873-1879 O '65. (MIRA 18:10)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.

AKHTYRSKIY, N.P., inzh.; NOVOZHILOV, G.P., inzh.; PANFIL', L.S., inzh.;
~~PAKHOMOV~~, V.Ya., inzh.

Complex 3.3 Kr. a.c. traction substation. Transp. stroi. 14
no.11:9-13 N '64. (MIRA 18:3)

AKHTYRTSEVA, N.; NESTEROV, N. A.

Selected lectures for correspondence school students. Vest. Mosk. un. Ser. 5: Geog. 17 no.6:85-86 N-D '62. (MIRA 16:1)

1. Voronezhskiy universitet.

(Geography)

AKHTYRSKIY, V.I.; STANOVSKIU, I.G., val'tsetokar'; MOROZOV, P.G., master val'tsetokarnoy masterskoy.

Automatic hard facing of rolling mill rolls. Metallurg no.12:20-23 D '56. (MLRA 10:1)

1. Inzhener TSentral'noy zavodskoy laboratorii (for Akhtyrskiy).
2. Kramatorskiy metallurgicheskiy zavod imeni Kuybysheva (for Stanovskiy). (Hard facing) (Rolls (Iron mills))

AKHTYRSKII, V.I.

AKHTYRSKIY, V. I.

PONOMAREV, P.U.; VAL'TSEV, A. M.; MASONOV, M.A.; MERKULOVA, Ye. S.; SAVCHENKO, A.S.; DUKHANIN, A.S.; AKHTYRSKIY, V.I.

Rolling of square blanks made by continuous casting. Biul. TSNIICHM no. 8:43 '58. (MIRA 11:7)

1. Kramatorskiy metallurgicheskiy zavod im. Kuybysheva(for Ponomarev, Val'tsev, Masonov, Merkulova, Savchenko). 2. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii(for Dukhanin, Akhtyrskiy).
(Rolling(Metalwork))

18.3200,18.5100

78179
SOV/133-60-3-4/24

AUTHORS: Rutes, V. S., Nikolayev, N. A., Akhtryskiy, V. I.

TITLE: Formation of Internal Defects in Square Cast Billets During Continuous Pouring of Steel

PERIODICAL: Stal', 1960, Nr , pp 212-215 (USSR)

ABSTRACT: This is an investigation of the effect of the rate of pouring, reduction, secondary cooling, and other factors on formation of internal defects in continuously poured square cast billets with the purpose of finding the causes of defects and methods for their elimination. This investigation was conducted at the Novotul'skiy Metallurgical Plant (NTMZ), with participation of plant personnel. The investigated cast billets were of 200 x 200 mm cross section. The depth of liquid cavity and the "front of crystallization" were determined by the methods of the Central Scientific Research Institute of Ferrous Metallurgy (TsNIIChM), that is, by pouring in the lead and introducing radioactive isotopes of sulphur and phosphorus. The relationship between the

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Formation of Internal Defects in Square Cast Billets During Continuous Pouring of Steel

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depth of liquid cavity (L,m) and the rate of pouring (v,m/min) for steels St 3, 45, U7-U13, SkHL1, and SkhL4 was determined as L= 9.5v, where 9.5= coefficient corresponding to the time of complete solidification of billets in min. Therefore, the depth of liquid cavity is increasing with the increase of pouring rate (see Fig. 1). The degree of development of axial porosity is increasing with the increase of pouring rate, which was noted in previous work. The development of axial porosity in continuous cast billets is attributed to the considerable length of liquid cavity in the narrow tail part, leading to the formation of "bridges," interfering with the correct feeding of metal to subsequent portions. The authors state that axial porosity was more developed in high carbon steels (U7-U13) than in low carbon steels (St3 and SkhL1) (see Fig. 3). The increase of pouring rate is followed by the increase of templets with coarse porosity, characterized by points 3 and 4 of TsNIIChM scale. 0 point indicates an absolute dense central zone and points 3 and 4 indicate

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Formation of Internal Defects in Square Cast Billets During Continuous Pouring of Steel

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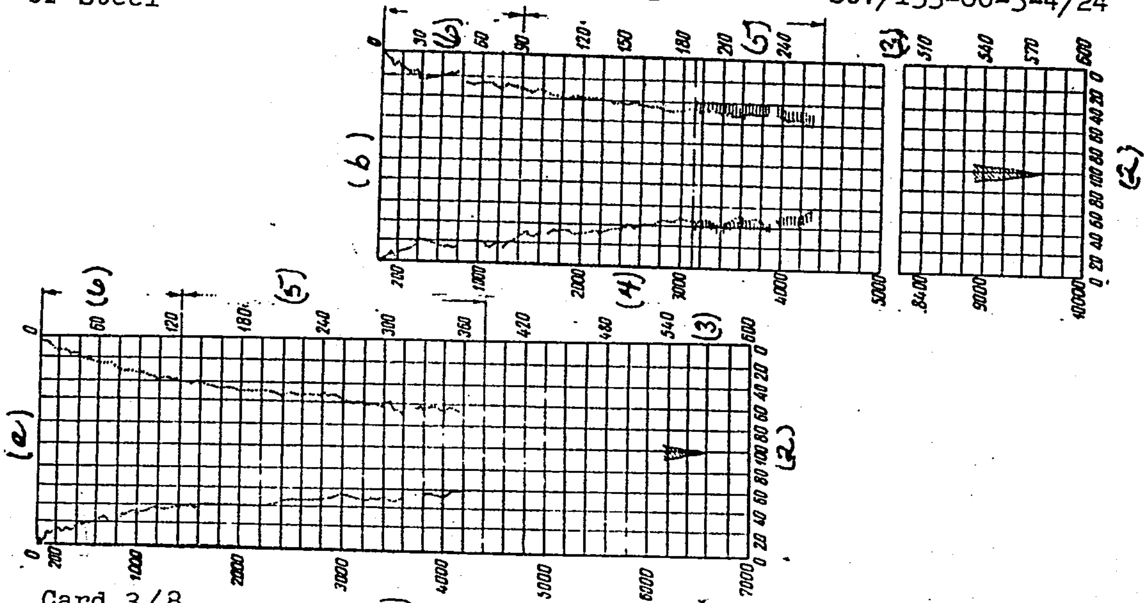

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Fig. 1. (Caption on Card 4/8)

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Fig. 1.The relationship between the depth of liquid cavity and the rate of pouring (a) when pouring at the rate of 0.7 m/min; (б) ditto at 1.0 m/min. (1) Distance from meniscus; (2) distance from surface, mm; (3) time, sec; (4) distance from meniscus of metal, mm; (5) in the zone of secondary cooling; (6) in crystallizer.

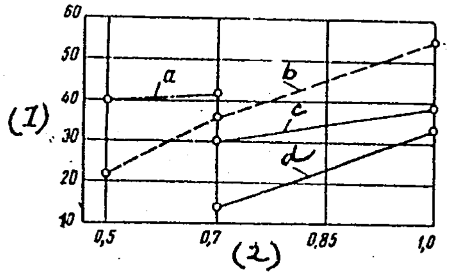

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Fig. 3. (Caption on Card 5/8)

Formation of Internal Defects in Square Cast Billets During Continuous Pouring of Steel

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Fig. 3. The effect of pouring rate on density of axial zone (number of templet points 3 and 4) of continuously cast billets of various steels: (a) U12-U13; (b) U7-U8; (c) St3; (d) SkhL1. (1) number of porous templets, %; (2) pouring rate, m/min.

porosity with voids larger than 1 mm. The internal zones of longitudinal and transverse templets often show some cracks. Depending on their location on cross section, these cracks (see Fig. 5) are divided into corner cracks (Fig. 5,a), intermediate cracks (Fig. 5,b) and spider-like central cracks (Fig. 5,c). The extent to which the billets are affected by segregation streaks and cracks in the intermediate zone are mainly determined by the amount of reduction produced by the rolls of pulling stands, when the core of billets is still liquid. The authors state that for improvement of quality of continuously cast billets the reduction of billets before their complete

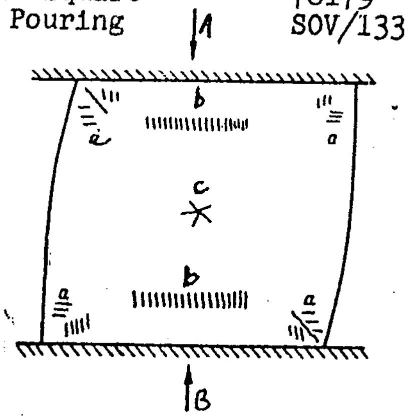

Fig. 5. A diagram of location of internal cracks and segregation streaks occurring in continuously cast billets. A-B, pulling rolls.

solidification should be eliminated. The distortion of shape begins in the crystallizer and continues until final solidification of the billet. Therefore, the authors recommend an improvement not only in the

Formation of Internal Defects in Square Cast Billets During Continuous Pouring of Steel

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design of crystallizers, but of the whole system below crystallizers. The authors feel that the mechanism of crack formation in the central zone requires further study. They studied the weldability of internal porosity and small cracks in continuously cast billets by hot deformation at different reductions. They state that full welding of internal intercrystalline hot cracks in investigated steels could be obtained only after 4 repeated reductions of the cast billets. However, for carbon tool steel U7-U13 even 4 consecutive reductions were not sufficient for complete welding of axial porosity, and only 8 consecutive reductions gave sufficient central density. There are 9 figures; and 4 references; 2 Soviet, 1 German and 1 French.

ASSOCIATION: TsNIIChM and Ukrainian Institute of Metals (TsNIIChM i Ukrayinskiy institut metallov)

Card 7/8

Formation of Internal Defects in Square Cast Billets During Continuous Pouring of Steel

78179
SOV/133-60-3-4/24

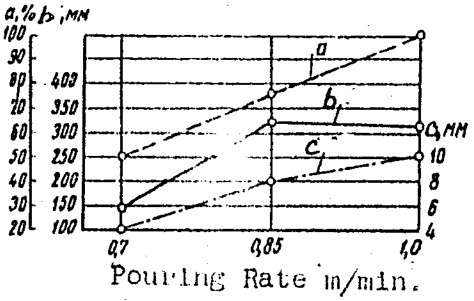

Fig. 7. The effect of pouring rate and reduction by pulling rolls on development of cracks and segregation streaks. (a) number of templets with cracks and streaks in %; (b) average summary length of cracks and streaks, mm; (c) difference in sides of castings (mm) resulting from reduction by pulling rolls.

Card 8/8

S/137/62/000/001/015/237
A060/A101

AUTHORS: Akhtyrskiy, V. I., Sladkoshteyev, V. T.

TITLE: Structure of steel ingots with 200 x 200 mm cross-section under continuous casting

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 63, abstract 1V394 ("Sb. tr. Ukr. n.-i. in-t metallov", 1961, no. 7, 115 - 124)

TEXT: The authors cite the results of an investigation as to the structure of a large number of billets with cross-section 200 x 200 mm, obtained by continuous casting in an installation of the Novo-Tul'skiy metallurgical plant from carbon steel grades from steel 3 to У13 (U13). After investigating 4 - 8 templets of each heat with weight 5 - 10 tons, it was established that in the main the billets have a dendritic structure and the percentage of smelts with acicular structure increases as the metal temperature increases. The extent of the acicular zone for the grades of steel investigated also increases as the temperature of the metal cast and the carbon content are raised. The leading part of the billet is affected by a shrink hole up to the depth of 0.6 - 1.0 m, which at a billet length of 16.5 m (for a 10-ton heat) corresponds to an average

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trimming of 3.6 - 6.0%. It is noted that central friability and porosity are remarkably developed in the billets, the formation of which is related to the rise of "bridges" and to settling crystallization. It is demonstrated that coarse axial porosity increases as the pouring rate is increased and as the C content in the metal is raised. Chemical analysis has established the absence of notable liquation of the elements over the cross-section and the length of billets of mild and medium-carbon steel, whereas in tool steel the liquation of C and S is more pronounced.

✓

I. Granat

[Abstracter's note: Complete translation]

S/137/62/000/002/021/144
A006/A101

AUTHORS: Sladkoshteyev, V. T., Potanin, R. V., Akhtyrskiy, V. I., Kuritskiy, M. A., Bat', Yu. I.

TITLE: Experimental industrial unit for the continuous teeming of steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 47, abstract 2V282 ("Sb. tr. Ukr. n.-i. in-t metallov", 1961, no. 7, 143-150)

TEXT: The authors describe an experimental industrial continuous steel-teeming unit constructed at the Ukrainian Institute of Metals. The design of this unit provides for the casting of round and square blanks, 60 - 200 mm in diameter. On the teeming platform located at 11.5 m height from the shop floor, there are: an assembled water-cooled Cu-crystallizer with a mechanism for its reciprocal displacement, and an intermediate teeming device without a stopper and with a metering zirconium nozzle of 14 - 19 mm in diameter. Directly underneath the crystallizer on a 3 m long section there are the secondary cooling sprayer unit and the guide rolls. To pull the blanks an electric-driven drawing stand is used, which makes it possible to regulate the speed of drawing the blanks within a wide range. The roll pressure on the blank may also vary from 1.0 to

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Experimental industrial unit ...

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A006/A101

5.0 tons by adjusting the springs. Below the drawing stand there is the gas-cutting cabin, which moves during the blank cutting process along vertical guides at 3.2 m pace. The cut-off blank pieces drop into the collecting device pocket where they are accumulated. The metal intended to be teemed on the unit is cast in a 1.0-ton electric furnace and is supplied to the unit in a ladle without a stopper. The ladle is lifted to the unit with the aid of a telpher line. The unit is controlled from a desk located on the teeming platform; the gas cutter and the collecting device are controlled from a second desk located in the gas cutting cabin. The unit is equipped with a control-measuring mechanism. There is a templet shop near the unit.

I. Granat

[Abstracter's note: Complete translation]

Card 2/2

GLAZKOV, P.G., inzh.; GRIGOR'YEV, F.N., inzh.; MURZOV, K.P., inzh.; SLADKOSHTEYEV, V.T., inzh.; Prinimali uchastiye: MALAKHA, A.V.; POKRASS, L.M.; DRUZHININ, I.I.; OSIPOV, V.G.; KONDRATYUK, A.M.; POLYAKOV, I.V.; GORDIYENKO, M.S.; PAVLOV, M.T.; KOPYTIN, A.V.; PARASHCHENKO, R.A.; POTANIN, R.V.; AKHTYRSKIY, V.I.; BRUK, S.M.; YEVTUSHENKO, V.V.; LEYTES, A.V.; STRELETS, V.M.

Continuous casting of 140-ton steel heats with four-channel equipment. Stal' 22 no. 6:501-504 Je '62. (MIRA 16:7)

AM4017083 BOOK EXPLOITATION S/

Sladkoshteyev, Vladimir Timofeyevich; Akhty*rskiy, Vladimir Ivanovich; Potanin, Ruslan Vasil'yevich

Quality of continuously cast steel (Kachestvo stali pri neprery*vnoy razlivke) Moscow, Metallurgizdat, 1963, 173 p. illus., biblio. Errata slip inserted. 1,250 copies printed.

TOPIC TAGS: quality control, cast steel, rimmed steel, killed steel, continuous casting

PURPOSE AND COVERAGE: Metallurgical plants and research institutes in our country and abroad have accumulated a great deal of experience in the continuous casting of various grades of steel into castings of diverse cross section. In generalizing this experience, the authors of the book consider the problems of the quality of the metal in continuous casting giving special attention to the nature of the defects, their origin, and methods of eliminating them. The book is intended for engineers and technicians in metallurgical shops and plants.

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SUB CODE: ML SUBMITTED: 23 Mar 63 NR REF SOV: 059

OTHER: 000 DATE ACQ: 10 Mar 64

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SLADKOSHTEYEV, V.T., kand. tekhn. nauk; GRIGOR'YEV, F.N.; MURZOV, K.P.;
POTANIN, R.V.; AKHRYRSKIY, V.I.; DRUZHININ, I.I.

Continuous casting of low-carbon steel into wide slab ingots.
Sbor. trud. UNIIM no.9:135-145 '64 (MIRA 18:1)

SLADKOSHTEYEV, V.T., kand. tekhn. nauk; AKHTYRSKIY, V.I.; POTANIN, R.V.

External hot cracks during the continuous casting of steel.
Sbot. trud. UNIIM no.9:146-152 '64 (MIRA 18:1)

MURAV'YEV, V.N.; AKHTYRSKIY, V.I.; Prinimali uchastiye: SLIN'KO, A.N.;
POTANIN, R.V.; DRUZHININ, I.I.; OSIPOV, V.G.; KUCHMINSKIY, Yu.M.

Nature of the nonmetallic inclusions in flat continuously cast ingots. Sbor.trud. UNIIM no.4:112-123 '65. (MIRA 18:11)

SLADKOSHTEYEV, V.T.; AKHTYRSKIY, V.I.; POTANIN, R.V.; KUCHMINSKIY, Yu.M.;
SLIN'KO, A.N.; Prinimali uchastiye: GRIGOR'YEV, F.N.; DRUZHININ,
I.I.; OSIPOV. V.G.; PARASHCHENKO, R.A.; KOPYTIN, A.V.; KOLESNIK,
A.Ye.; KHAVALADZHI, V.I.; NOSOCHENKO, O.V.

Material balance of smelting with continuous casting. Sbor.trud.
UNIIM no.11:124-130 '65.

(MIRA 18:11)

AKHTYRTSEV, B. P.

AKHTRYTSEV, B. P. -- "Modification of the Soils and Their Fertility in the Case of a Change in the Vegetation in a Typical and in a Southern Forest-Steppe of the Voronezh Oblast." Voronezh State U, Biological-Soil Faculty, Voronezh, 1955 *(Dissertation for the Degree of Candidate in Sciences)

SO: Knizhnaya letopis', No. 37, 3 September 1955

*For the Degree of Candidate in Biological Sciences

Akhtyrtsev, B.P.

USSR/Soil Science - Genesis and Geography of Soils. J-2

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10454

Author : Akhtyrtsev, B.P.
Inst : -
Title : Changes in Common Chernozem When an Oak Grove Has Been Growing on it For 80 Years.

Orig Pub : Pochvovedeniye, 1956, No 11, 50-58

Abstract : A description is given of the results of physical, chemical, and physico-chemical analysis of the soils under an unmixed oak grove which was planted in 1875 in Vorontsovskiy rayon, Voronezhaskaya oblast'. The properties of the soils of the grove are contrasted with those of the soils of the adjacent field and of Shipov forest. The upper horizons of the soils of the oak grove proved to be enriched with water-resistant aggregates and to possess significant quantities of humus and total N, as well as the hydrolized form of N. Biological accumulation of absorbed

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AKHTYRTSEV, B.P.; DZHEGERIS, B.T.

Evolution of Soloth soils. Pochvovedenie no.6:71-78 Je '59.
(MIRA 12:9)

1. Voronezhskiy gosudarstvennyy universitet.
(Soloth soils)

AKHTYRTSEV, B.P.

Characteristics of meadow-Chernozem soils in the southern part of the Oka-Don Lowland. Nauch. dokl. vys. shkoly; biol. nauki no.1:188-192 '60. (MIRA 13:2)

1. Rekomendovana kafedroy pochvovedeniya Voronezhskogo gosudarstvennogo universiteta.
(Oka Valley--Soils) (Don Valley--Soils)

AKHTYRTSEV, B.P.

Soil characteristics in various provinces of the subzone of hardwood forests in Central Russian Upland. Pochvovedenie no.1:26-40 Ja '62. (MIRA 17:1)

1. Voronezhskiy gosudarstvennyy universitet.

AKHTYRTSEV, B.P.; YAROVENKO, V.V.

Fossil soils of the flood plain of the Don River. Nauch. dokl. vys. shkoly; biol. nauki no.2:178-184 '62. (MIRA 15:5)

1. Rekomendovana kafedroy agronomii Voronezhskogo gosudarstvennogo universiteta. (DON VALLEY--SOILS)

AKHTYRTSEV, B.P.

Soils of the broad-leaved forests of the Central Black Earth Region. Izv.Vor.otd.Geog.ob-va no.3:133-139 '61. (MIRA 15:11)
(Central Black Earth Region--Forests and forestry)
(Central Black Earth Region--Soils--Classification)

AKHTYRTSEV, B.P.

Evaluation of forest soils in connection with their agricultural use.
Nauch. zap. Vor. otd. Geog. ob-va;44-53 '63. (MIRA 17:9)

AKHTYRTSEVA, N.I.

Landform characteristics of the Kalachskaya Upaland part of the Khoper Valley. Izv.Vor.otd.Geog.ob-va no.3:73-79 '61.
(MIRA 15:11)

(Kalachskaya Upland--Landforms)

MIL'KOV, F.N.; NESTEROV, A.I.; AKHTYRTSEVA, N.I.; BERDNIKOVA, Z.P.

Morphological structure and the problems of the efficient use of ravines in the Central Chernozem Region. Nauch. zap. Vor. otd. Geog. ob-va 17-23 '63. (MIRA 17:9)

AKHUD-ZADE, I.M.

AKHUD-ZADE, I.M.

[Results of the introduction and prospects for the development of the persimmon in Azerbaijan] Itogi introduktsii i perspektivy razvitiia khurmy v Azerbaidzhane. Baku, Akademiia nauk Azerbaidzhanskoi SSR, 1957. 105 p. (MIRA 11:3)
(Azerbaijan--Persimmon)

AKHUMDOVA-TUAYEVA, L.M.

Lepidoptera injurious to forest plantations in Kutkashen District of the Azerbaijan S.S.R. Uch. zap. AGU no.9:65-72 '55. (MLRA 9:11)

(Kutkashen District--Lepidoptera)
(Trees--Diseases and pests)

AKHUMOV, A.V.

Centralization of repairing machine tools. Mashinostroitel' no.6:1-3 Je '60. (MIRA 13:8)
(Machine tools--Maintenance and repair)

AKHUMOV, A.V., inzhener-ekonomist

Centralization of repairing metal-cutting equipment. Trudy LIEI no.31:100-123 '60. (MIRA 13:10)
(Machine tools--Maintenance and repair)

AKHUMOV, A.V., inzh.

Method for consolidated determination of the complexity of electric equipment repair operations. Prom. energ. 17 no.3:10-11 Mr '62. (MIRA 15:2)

(Electric machinery--Repairing)

MISHCHENKO, K.; SHCHUKAREV, S.; AKHUMOV, Ye.; RAZUMOVSKIY, V.

Vasilii Ivanovich Semishin, 1904- . Izv. vys. ucheb. zav.; khim. i khim. tekh. 7 no.3:528 '64. (MIRA 17:10)

AKHUMOV, Ye.I.

Ca

2

PROCESSES AND PROPERTIES INDEX

The technological calculations for the equilibrium of the chlorides of potassium, sodium and magnesium in water at high temperatures. E. I. Akhumov and B. B. Vasil'ev. *J. Chem. Ind.* (Moscow) 8, No. 17, 17-23(1931).—As a first step in the investigation of the system NaCl-KCl-$MgCl_2$-H_2O at high temps. the equil. NaCl-KCl-H_2O was studied. The soly. of KCl in H_2O from 100° to 230° was detd. The soly. curve continues from lower temps. without a break and the soly. is almost directly proportional to the temp. The soly. curve of NaCl in H_2O from 100° to 200° also continues unbroken from lower temps. In satd. mixts. of KCl and NaCl, the soly. of KCl rises steadily from 10° to 200°, but that of NaCl drops to a min. at 100-110° and then rises to 200°. Based on these data a method of extn. of KCl from sylvite is given. A satd. soln. of KCl and NaCl is obtained from the mineral at 200°, and cooled slowly to 10°. Large crystals of pure KCl sep. and are easily removed. The mother liquor is then either concd. at const. temp. or salted out with more NaCl. In either case, a further quantity of pure KCl ppts. Thus more rapid extn. and larger yields of KCl are obtained. Tables are given showing the exact amts. of all the substances involved either in the ppt. or in the soln. at various temps. in the different stages of the process. H. M. Leicester

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Bc

a-1

Study of aqueous solutions at high temperatures. I, II. R. I. Agaunov and B. B. Vasiliev (J. Gen. Chem. Russ., 1932, 2, 271—281, 282—289).—I. Methods and apparatus for the determination of solubility of salts at high temp. are described.

II. Equilibrium diagrams for KCl-NaCl-$MgCl_2$-H_2O at 125°, 150°, 200°, and 265° are given. R. T.

L

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

AKHUMOV, Ye.I.

Ca

18

Dissolving carnallite deposits through a well boring by Preobrazhenskii's method. E. I. AHUMOV AND B. B. VASILIEV. *Kalii* (U. S. S. R.) No. 5-6, 27-37(1932).—A method for working carnallite deposits is described. It consists essentially of sinking a well to the deposits (200-250 m. below the surface). Cold or hot water or steam is conducted down the well through pipes to dissolve the K salts; the resulting soln. is then pumped out and evapd. Theoretical figures and computations for the technology of the process with the use of cold water, hot water or steam are compared, with results favoring hot water. Cost of operation in each case is given for U. S. S. R. J. S.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AKHUMOV, Ye. I.

(A) Equilibria in the system NaCl-KCl-$MgCl_2$-H_2O. N. A. Osokoreva, M. A. Opuikhtina, D. N. Shoikhet, E. F. Plaksina, and A. I. Zaslavski. (B) Calculation of the equilibrium in water at hight temperatures. E. I. Akhumov and B. B. Vasiliev (Trans. State Inst. Appl. Chem. U.S.S.R., 1932, No. 16, 24-47, 48-59).- Isotherms and polytherms have been determined at 10-110° for NaCl-KCl-$MgCl_2$- H_2O, NaCl-$MgCl_2$- H_2O, KCl-$MgCl_2$-H_2O; and NaCl-KCl. Ch. Abs. (e)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

AKHUMOV, Ye. I.

CA

2

Technological computations for equilibrium of sodium chloride and magnesium chloride in water at elevated temperatures. E. I. Akhumov and B. B. Vasil'ev. *Kalii* (U. S. S. R.) **1933**, No. 3, 10-20.—A study of the system NaCl-MgCl$_2$-H$_2$O at 100-200°.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Ca

Decomposition of Solikamsk sylvites and carnallites at high temperatures. B. B. Vasil'ev, *Trans. State Inst. Applied Chem.* (U. S. S. R.) 1933, No. 18, 7-14.—**The technological calculations for the equilibrium of the chlorides of potassium, sodium and magnesium in water at high temperatures.** E. I. Akhumov and B. B. Vasil'ev. *Ibid.* 14-32; cf. *C. A.* 26, 1500; 27, 568, 4994; Vilnyanskii and Bannuih, *C. A.* 27, 568.—The methods of calcn. and exptl. extn. were applied to the deposits of Solikamsk sylvites and carnallites and to the brines of Perekop and Aral-Caspian lakes. Chas. Blanc

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES INDEX

Ca

1

Electrometric titration of manganese by the Volhard method. K. I. Akhumov and B. B. Vasil'ev. *Zavodskaya Lab.* 3, 407-9(1934).—Modifications of the method by Foulk and Bawden (*C. A.* 20, 3144) and Brann and Clapp (*C. A.* 23, 790) are discussed. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AKHUMOV, Ye. I.

The preparation of sodium amide by the process of the State Institute of Applied Chemistry.- G. I. Voinilovich, B. B. Vasil'ev and E. I. Akhumov. J. Chem. Ind. (Moscow) 1934, No. 10, 54-9.- NaCl is electrolyzed in liquid NH_3, with an Fe cathode and a graphite anode. The diaphragm is asbestos. Temp. below 0^o, a pressure of 2-3 atm. and a potential of 4-5 v. give the best results. The pressure of gases in the cathode compartment should be 0.2-0.5 atm. greater than that in the anode compartment to prevent the gases of the latter from entering the former. The anode compartment should be small. $NaNH_2$ and H_2 are formed at the cathode, and Cl_2 is formed at the anode. The latter reacts with NH_3 to form N_2 and NH_4Cl. The loss of N_2 can be avoided by mixing H_2 from the cathode with the anode gases. H. M. L.

PROCESSES AND PROPERTIES INDEX

18

Sodium hydride. K. I. Akhmunov and B. B. Vasil'ev. Russ. 43,634, July 31, 1935. Molten $NaNH_2$ is treated at a temp. not exceeding 200° with H, and the NaH obtained is extd. from unchanged $NaNH_2$ with liquid NH_3.

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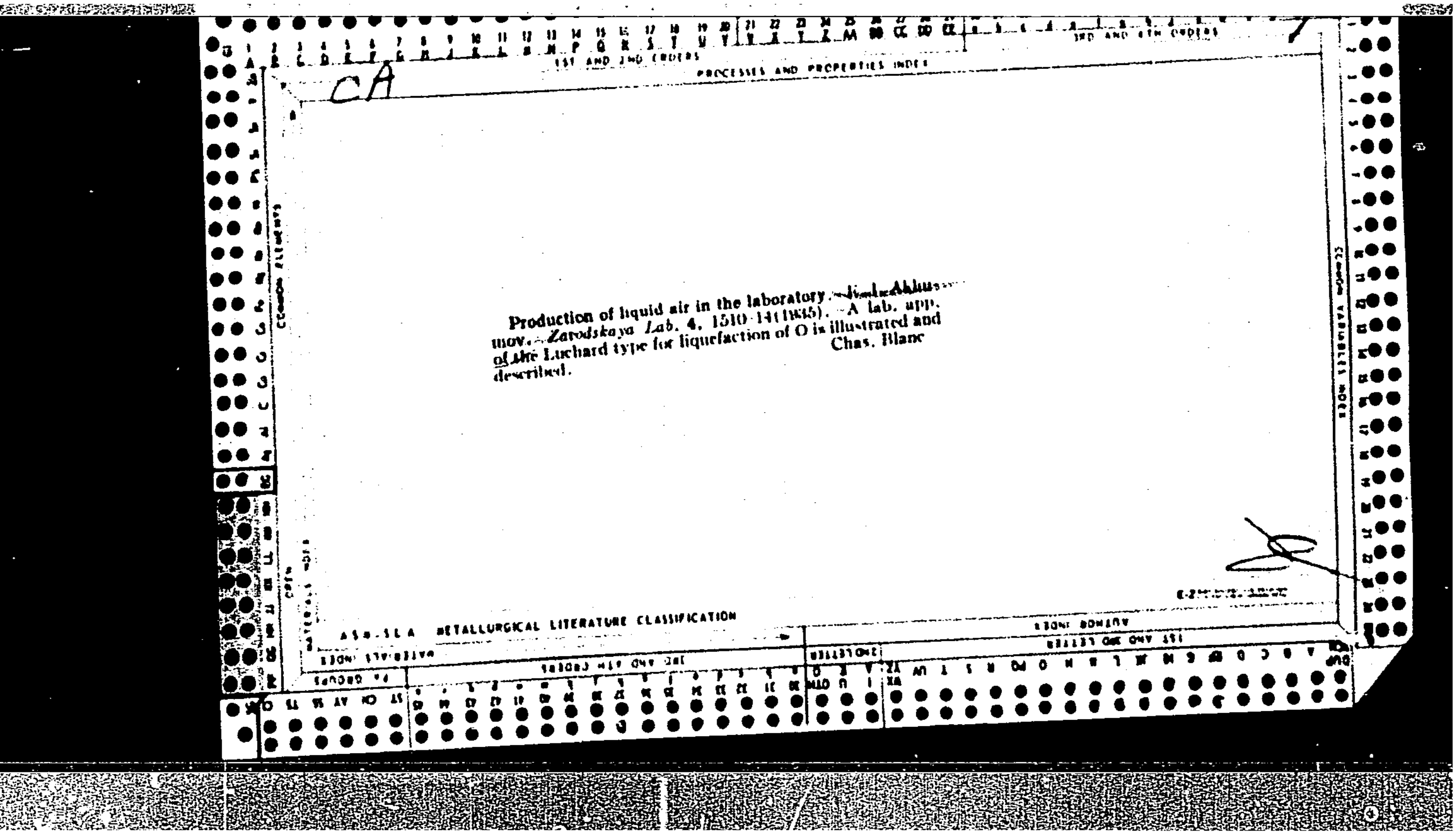
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CA

Production of liquid air in the laboratory. ~~I. I.~~ Akhumov. *Zavodskaya Lab.* 4, 1510-14(1935). —A lab. app. of the Luchard type for liquefaction of O is illustrated and described. Chas. Blanc

1ST AND 2ND ORDERS

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3RD AND 4TH ORDERS

BC

a-1

COMMON ELEMENTS

Electrolysis of sodium chloride in liquid ammonia. L. I. [illegible] and B. B. Vasiliev (J. Gen. Chem. Russ., 1935, 5, 334—342).—The conductivity of solutions of NaCl in liquid NH_3 rises with the [NaCl]; the decomp. potential of NaCl is 3·58 volts. Electrolysis with a diaphragm leads to production of NH_4Cl in the anode, and of $NaNH_2$ in the cathode section. R. T.

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